

Management Plan for the Summer Commercial Troll Fishery in Southeast Alaska, 2006

by

Brian Lynch

and

Pattie Skannes

June 2006

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

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Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mid-eye-to-fork	MEF
gram	g	all commonly accepted		mid-eye-to-tail-fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs., AM, PM, etc.	standard length	SL
kilogram	kg			total length	TL
kilometer	km	all commonly accepted			
liter	L	professional titles	e.g., Dr., Ph.D., R.N., etc.	Mathematics, statistics	
meter	m			<i>all standard mathematical</i>	
milliliter	mL	at	@	<i>signs, symbols and</i>	
millimeter	mm	compass directions:		<i>abbreviations</i>	
		east	E	alternate hypothesis	H _A
		north	N	base of natural logarithm	<i>e</i>
		south	S	catch per unit effort	CPUE
		west	W	coefficient of variation	CV
		copyright	©	common test statistics	(F, t, χ^2 , etc.)
		corporate suffixes:		confidence interval	CI
		Company	Co.	correlation coefficient	
		Corporation	Corp.	(multiple)	R
		Incorporated	Inc.	correlation coefficient	
		Limited	Ltd.	(simple)	r
		District of Columbia	D.C.	covariance	cov
		et alii (and others)	et al.	degree (angular)	°
		et cetera (and so forth)	etc.	degrees of freedom	df
		exempli gratia		expected value	<i>E</i>
		(for example)	e.g.	greater than	>
		Federal Information		greater than or equal to	≥
		Code	FIC	harvest per unit effort	HPUE
		id est (that is)	i.e.	less than	<
		latitude or longitude	lat. or long.	less than or equal to	≤
		monetary symbols		logarithm (natural)	ln
		(U.S.)	\$, ¢	logarithm (base 10)	log
		months (tables and		logarithm (specify base)	log ₂ , etc.
		figures): first three		minute (angular)	'
		letters	Jan,...,Dec	not significant	NS
		registered trademark	®	null hypothesis	H ₀
		trademark	™	percent	%
		United States		probability	P
		(adjective)	U.S.	probability of a type I error	
		United States of		(rejection of the null	
		America (noun)	USA	hypothesis when true)	α
		U.S.C.	United States	probability of a type II error	
			Code	(acceptance of the null	
		U.S. state	use two-letter	hypothesis when false)	β
			abbreviations	second (angular)	"
			(e.g., AK, WA)	standard deviation	SD
				standard error	SE
				variance	
				population	Var
				sample	var
Weights and measures (English)					
cubic feet per second	ft ³ /s				
foot	ft				
gallon	gal				
inch	in				
mile	mi				
nautical mile	nmi				
ounce	oz				
pound	lb				
quart	qt				
yard	yd				
Time and temperature					
day	d				
degrees Celsius	°C				
degrees Fahrenheit	°F				
degrees kelvin	K				
hour	h				
minute	min				
second	s				
Physics and chemistry					
all atomic symbols					
alternating current	AC				
ampere	A				
calorie	cal				
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity	pH				
(negative log of)					
parts per million	ppm				
parts per thousand	ppt,				
	‰				
volts	V				
watts	W				

FISHERY MANAGEMENT REPORT NO. 06-36

**MANAGEMENT PLAN FOR THE SUMMER COMMERCIAL TROLL
FISHERY IN SOUTHEAST ALASKA, 2006**

by

Brian Lynch

Alaska Department of Fish and Game, Division of Commercial Fisheries, Petersburg

and

Pattie Skannes

Alaska Department of Fish and Game, Division of Commercial Fisheries, Sitka

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1565

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*Brian Lynch,
Alaska Department of Fish and Game, Division of Commercial Fisheries
16 Sing Lee Alley, Petersburg, Alaska 99833-0667 USA*

*Pattie Skannes,
Alaska Department of Fish and Game, Division of Commercial Fisheries
304 Lake Street, Room 103, Sitka, Alaska 99835-7563*

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ABSTRACT

This document summarizes the plan that the Alaska Department of Fish and Game (ADF&G) will follow to manage the 2006 Southeast Alaska summer commercial salmon troll fishery, according to the Alaska Board of Fisheries adopted guidelines listed in the State of Alaska Administrative Code, Title 5, Chapter 29 Salmon Troll Fishery.

Key words: salmon, troll, summer, commercial, management plan

INTRODUCTION

The Southeast Alaska/Yakutat commercial salmon troll fishery occurs in State of Alaska and Federal Exclusive Economic Zone (EEZ) waters east of Cape Suckling and north of Dixon Entrance. The fishery is managed according to regulations promulgated by the Alaska Board of Fisheries (BOF), the North Pacific Fishery Management Council (NPFMC), the National Marine Fisheries Service (NMFS), and the U.S./Canada Pacific Salmon Commission (PSC). Alaska Department of Fish and Game (ADF&G), under emergency order authority, conducts inseason management. In 2006, the all-gear king salmon fishery will be managed to achieve a harvest target based on the “U.S./Canada 1999 bilateral agreement for the Southeast Alaska all-gear king catch” (Agreement). The Agreement specifies a harvest based on a relationship between a preseason Abundance Index (AI) generated by the Pacific Salmon Commission’s Chinook Technical Committee and a target harvest rate specified in the Agreement. The Agreement also provides for an inseason adjustment to the harvest level based on an assessment of inseason data. Coho salmon will be managed to ensure escapement goals and to achieve BOF allocation guidelines. Coho salmon near Dixon Entrance will be managed in cooperation with Canada according to the Agreement.

This management plan discusses the management objectives and methods used to achieve BOF, NPFMC, NMFS, and PSC policies and goals for the commercial summer troll fishery. This plan covers commercial trolling for king, coho, and chum salmon. Other species caught and retained by trollers are considered incidental.

2006 SUMMER TROLL FISHERY DATES

July 1 through September 20: King salmon may be harvested only during open periods announced by ADF&G. The coho salmon season may be extended no more than 10 days (September 21 through September 30) in Districts 101 through 116 (Figure 1) depending on run strength (5 AAC 29.110).

MANAGEMENT APPROACH

KING SALMON

The majority of the king salmon harvested in the Alaska summer troll fishery are of wild stock origin. The hatchery stocks originate in British Columbia, Canada, Washington, and Oregon with a relatively small number from Alaskan hatcheries. As a result, the Southeast Alaska king salmon harvest is managed on an annual, all-gear catch quota established by the United States and Canada through the PSC. The ceiling is now abundance-based, with increased quotas when abundance is high, and vice versa. In addition to the catch ceiling of treaty fish, provisions of the Pacific Salmon Treaty (PST) administered by the PSC provide for an additional harvest of king salmon that have been produced in Alaskan hatcheries (add-on). The all-gear add-on is equal to

the total number of Alaskan hatchery king caught, minus the pre-treaty production of king salmon (5,000), and a risk adjustment factor.

Management Objectives

1. Achieve the allowable king salmon harvest.
2. Maximize the harvest of Alaska hatchery-produced king salmon.
3. Manage the fishery according to the BOF's Summer Salmon Troll Fishery Management Plan (5 AAC 29.100)
4. Continue the coastwide natural king salmon stock-rebuilding program.
5. Achieve catch allocations among user groups as mandated by BOF.
6. Minimize the incidental mortality of king salmon to the extent practicable.

Management Methods

General Summer Fishery

Historically, the majority of king salmon are taken during the general summer opening when the majority of waters, including the outside waters, are open to trolling. Unlike the spring fishery, a quota is set for management of king salmon. One of the major functions of ADF&G's troll management plan is determining when the general summer season for king salmon must be closed in order to stay within the allowable harvest. Tabulating the up-to-date troll catch is difficult due to the large number of fish tickets and the difficulty of receiving them from remote areas in a timely manner. Therefore, a Fisheries Performance Data (FPD) program, consisting of confidential interviews with commercial trollers as they deliver catches, is used to estimate daily catch rates in six areas (Figure 2). The total number of days the fishery will be open for king salmon retention is calculated by dividing the summer season harvest goal by the estimated daily catch by the troll fleet. From 1992 through 1995, and again in 2000 and 2001, ADF&G announced a fixed number of days beginning July 1, due to the low number of king salmon available for harvest. From 1996–1999 and 2002–2005, ADF&G returned to inseason management. For 2006, ADF&G will manage the first opening period in season. Inseason management for 2006 is preferable because the relatively large king quota makes it more difficult to project the number of days it will take to harvest the quota. ADF&G will manage the summer troll season according to BOF management plan (5 AAC 29.100), which calls for harvesting 70% of the remaining king salmon troll quota (see next section) in an initial opening beginning July 1. The remainder of the king salmon quota is to be harvested following any closure for coho salmon conservation and/or allocation in August. The management plan also calls for all areas to be open during the July 1 opening. Following the first king opening, the areas of high king abundance (Figure 3) will be closed unless fewer than 30% of the total remaining number of king salmon were harvested in the first opening. In addition, during the second king salmon opening, if ADF&G determines after 10 days that the annual troll king salmon harvest ceiling might not be reached by September 20, the commissioner shall reopen by emergency order the areas of high king salmon abundance.

The hatchery add-on is calculated in season through port sampling programs. King salmon are sampled for the presence of adipose fins. The heads from fish missing adipose fins are then sent to the Juneau mark, tag and age lab for processing. Coded wire tags (CWT) are removed from

the heads and decoded. The number of Alaskan hatchery fish is calculated by expanding the number of Alaskan hatchery-produced king salmon in the sampled catch by the total catch.

Projected 2006 King Salmon Harvests

The king salmon fisheries will be managed according to the Agreement. In addition to the pre-treaty “base catch,” of 3,700 king salmon, and the hatchery catches in the winter and spring fisheries, Alaska hatcheries are projected to contribute approximately 7,800 king salmon to the summer troll harvest for a projected 2006 total catch of 23,100 Alaska hatchery king salmon. The actual hatchery add-on will be determined in season and finalized postseason from CWT estimates.

At the February 1997 and January 2006 BOF meetings, sharing percentages were established for the recreational and commercial troll and net king salmon fisheries (not including Alaska hatchery king salmon). The commercial troll fishery was allocated 80% and the recreational fishery 20% of the PST quota, after subtracting 4.3% from the total for the purse seine fisheries, 2.9% for the drift gillnet fishery, and 1,000 for the setnet fishery. Each group is responsible for proportionally sharing the 5,000 pre-treaty king salmon harvest and risk adjustment factors.

The Chinook Technical Committee (CTC) of the PSC has determined that the king salmon abundance index for Southeast Alaska for 2006 is 1.69. This abundance index equates to an all-gear quota for treaty king salmon of 346,800 fish. This quota is 69,600 fish fewer than the 2005 pre-season quota but is still the 5th highest allowable catch since the PST has been in effect (1985). The large king salmon quotas in recent year's is due to significant increases in abundance projections over the past several years for nearly all stock groups that are harvested in the Southeast Alaska all-gear king salmon fishery. However, king salmon abundance is cyclical and stock abundance is now likely on the downward side of that cycle. According to the BOF allocation plan outlined above, the troll fishery allocation of the treaty quota is approximately 256,700 fish. The summer troll treaty quota is calculated by adding the winter treaty harvest (44,900 fish), the spring treaty harvest (estimated 22,500 fish), the pre-treaty Alaska hatchery harvest (3,700 fish), and a statistical risk factor surrounding the Alaska hatchery contribution estimate of 1,000 fish, and subtracting the catch of Transboundary River fish above the base period catch (estimated at 1,600 fish). The resultant sum is then subtracted from the troll allocation. This results in a summer troll quota of approximately 186,200 Treaty fish (36,600 fewer than 2005). In addition, under the BOF plan, 70% of the summer quota is to be harvested during the first summer opening beginning July 1. Therefore, the target catch for the first opening will be approximately 130,300 treaty fish, plus an estimated 3% Alaska hatchery fish, or a total first summer opening target catch of 134,400 fish. The second king opening treaty target catch is projected to be approximately 58,200 (55,900 Treaty) fish. However, the actual target for the second opening will be dependent upon the catch in the first king opening and any changes in the spring fishery catch.

Preliminary Treaty King Salmon Troll Fishery Harvests for the 2006 Season

KING SALMON CATCHES					
Treaty Quota	Seine	Drift GN	Set GN	Sport	Troll
346,800	14,912	10,057	1,000	64,166	256,664
			Total	Hatchery	Treaty Fish*
2006 Troll Numbers:		Winter	48,883	3,990	44,900
		Spring	33,000	10,500	22,500
Pre-Summer Total Catch:					67,400
Pre-treaty hatchery and statistical risk factor:					4,700
Total pre-Summer Catch:					72,100
Transboundary Rivers directed catch					-1,600
					70,500
Summer Total = Troll - Pre-summer total - Pre-treaty and risk factor - TBR: 256,664 – 77,800					186,200
Projected First Summer Treaty Fish Target = 70% summer total =					130,300
Projected Second Summer Treaty Fish Target = Summer total-First summer catch =					55,900

*Numbers are rounded.

ADF&G will update the preseason projection of abundance with actual fishery catch and effort statistics immediately following the closure of the first opening. Any adjustments to the targeted all-gear harvest based on this inseason data will be made as soon as possible.

Based on past fishery performance at similar abundance levels of treaty king salmon, ADF&G anticipates the first opening will last between **8 and 12 days**. However, effort and catch rates are highly variable and because the projected fishery length is based on historical effort levels the actual length of the first opening could be significantly different than projected. Closure announcements and any updates will be made via U.S. Coast Guard marine advisory broadcasts and trollers are advised to either listen to the U.S. Coast Guard Marine Advisory broadcasts daily or stay in close contact with ADF&G or processors for any such announcements.

Following the closure of the initial summer king salmon period, all king salmon must be offloaded prior to resuming trolling for other species.

COHO SALMON

Most coho salmon harvested in the troll fishery are of Alaska origin. They spawn in approximately 2,500 streams in Southeast Alaska during the fall and early winter months. Coho salmon harvests were depressed in the mid to late 1970s but improved through most of the 1980s and 1990s. The 2005 harvest was 2.04 million fish, the 5th largest since statehood. An assessment in early August indicated that a mid-season closure of 4 days was appropriate in order to provide for adequate escapement to the inside waters. Based on the troll catch rates, 2005 appeared to be an above average return year. However, poor drift gillnet harvests indicated that 2005 was not necessarily a high-abundance year, so the troll fishery was not extended and closed by regulation on September 20. This was the first time the fishery was not extended since the 2000 season.

Troll fishery catches of coho salmon in outer coastal areas generally peak during mid-July to mid-August. Catches in inside fisheries generally peak during late August to mid-September. Most coho salmon migrate into spawning streams between late September and mid-October.

Early in the season, coho salmon stocks returning to southern Southeast Alaska are harvested by the troll fishery in northern and central outside areas where they intermingle with coho salmon bound for northern and central areas of the region. Management of coho salmon is based on aggregate abundance. Lack of a general coho salmon stock identification technique prevents assessment of run strength of individual stock groups contributing to these early-season mixed stock fisheries. Hatchery coho salmon production (almost entirely from Southeast Alaska facilities) first became significant in 1980. The contribution of hatchery coho salmon since then has varied from 0.4% of the total troll catch in 1980, 13.0% in 1986, 5.5% in 1988, and 20 to 26% from 1996 through 2004. The 2005 Alaska hatchery contribution of 16% was nearly identical to the 2004 contribution and was also slightly lower than the eight years prior to 2004, with the actual catch at the 2nd highest level during that same time period.

Management Objectives

- 1) Provide adequate escapement of coho salmon, by area, to ensure sustainable populations.
- 2) Provide maximum opportunities for harvest consistent with conservation objectives (5 AAC 29.110).
- 3) Manage the coho salmon fisheries to achieve allocations consistent with BOF regulations.
- 4) Manage coho salmon on the U.S./Canada border to comply with provisions of the Agreement.

Management Methods

As with king salmon, ADF&G's primary tool for inseason assessment of coho salmon catch rates is a program of dockside interviews with vessel skippers. Catches by the net fisheries are obtained from fish tickets, while the recreational catch is estimated from a creel census conducted by the Sport Fish Division. An assessment of run strength using troll catch per unit of effort (CPUE) data from the FPD program occurs in mid to late-July. Information available on individual coho salmon indicator stocks will also be considered in management actions.

Catch rates will be assessed in Southern Southeast Alaska from mid- through late-July to assess run strength of early-run coho salmon returning to systems in both Canada and the U.S., near the border. If run strength is weak, areas of Districts 101–104 may close for conservation for up to three weeks, from late July through mid-August, as per the terms of the June 1999 PST agreement.

Projected total season troll coho salmon harvests will be used as a relative index of total run size. Analysis of the FPD program has shown that the average area-wide catch-per-day for Statistical Weeks 28 and 29 (average week ending date is July 19) for the years 1996 to 2000, 2003 and 2004 is a good predictor of the wild coho salmon catch (Figure 4). If the projected overall run size is less than 1.1 million wild fish, ADF&G will implement a 7-day conservation closure beginning sometime in late July (5 AAC 29.110). In 2006, ADF&G will make this projection during the third or fourth week of July (Figure 4). The 2001, 2002 and 2005 catch and effort data will not be used for this projection because coho fishing or fish behavior patterns during those

years did not reflect patterns consistent with other years. ADF&G will continue to monitor all coho fisheries after the July assessment to determine if the number of coho salmon reaching inside areas will be adequate to provide for spawning requirements, given normal or even restricted inside fisheries. The primary abundance indicators for this assessment consist of relative harvest levels by all fisheries and, in particular, CPUE of wild fish in inside drift gillnet and sport fisheries compared to 1971–1980 levels. An assessment will be made in early August to determine when and how long to close the troll fishery for conservation and allocation purposes.

Cumulative catch per day of wild fish will be monitored in each of the six FPD areas (Figure 2) through August to assess run strength in each of the areas. Data will be compared with catches and CPUE within these areas and, if necessary, ADF&G will implement area-specific closures.

ADF&G, in years of high abundance, may extend the troll season through September 30 in portions of Districts 101 through 116 if there are no conservation concerns. ADF&G will consider the following data in determining if an extension is warranted:

1. Total run size projection,
2. Total harvests to date by gear by area,
3. CPUE relative to previous years by gear by area,
4. Percent of hatchery fish in the catch relative to previous years,
5. Survival projections for hatchery and wild stocks, and
6. Inseason escapement data.

ADF&G will announce any extensions, if warranted, during the third week of September.

Allocation Actions

The BOF has established long-term allocation goals for the coho salmon harvest by each commercial gear type. Target percentages established by the board are 61% for troll, 19% for purse seine, 13% for drift gillnet, and 7% for set gillnet. The board stated that subsistence, personal use, and recreational harvests of coho salmon are not affected by the established allocations between commercial gear types. The BOF also stated that:

“These percentages are guidelines only and may vary from season to season given natural fluctuations in salmon abundance and distribution and the limitations of fisheries management. It is, however, the board’s intent that these allocation guidelines be met as closely as possible over the long term. It is not the board’s intent for the department to disrupt any of the traditional commercial fisheries that the historical allocation is founded. The department may, however, make inseason adjustments to attempt to achieve these long term allocation guidelines.”

ADF&G will, however, implement applicable, existing regulations (5 AAC 29.100). These regulations are:

1. A regionwide troll closure for up to 10 days is required during the coho salmon season to address allocations between outer coastal fisheries and inside water fisheries if ADF&G determines that the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gillnet and recreational fisheries compared to the 1971–1980 levels. Primary inside fishery indicators for this assessment are overall coho salmon harvests, escapement projections for streams where escapement goals have been established and CPUE in the Tree Point, Prince of Wales, Taku/Snettisham, and Lynn Canal drift gillnet fisheries, and Juneau marine sport fishery.
2. In Sections 1-C, 1-E, and 1-F, salmon may be taken only as follows (Figure 5).
 - (a) Section 1-C: from August 15 through September 20.
 - (b) Section 1-E:
 - (1) In waters of W. Behm Canal within one nautical mile of the western shore of Revillagigedo Island north of the latitude of Escape Point 55°39.07'N. lat., 131°43.08' W. long. excluding the waters of the Neets Bay SHA (5 AAC 33.370) from July 1 through September 20.
 - (2) All other waters from July 13 through September 20.
 - (c) Section 1-F: east of a line from the northernmost tip of Kirk Point to Mary Island Light to the southernmost tip of Cone Island, from July 13 through September 20.
 - (d) Section 1-F: east of a line from the southernmost tip of Black Island to the westernmost tip of Slate Island to the westernmost tip of White Reef to the easternmost tip of Black Rock to the northernmost tip of Kirk Point, including the waters of Boca de Quadra not closed under 5 AAC 29.150(b)(2), from August 1 through September 20.
2. In District 8 the weekly fishing periods for trolling are the same as for drift gillnetting (Figure 6):
3. In District 11 salmon may be taken only in Sections 11-C and 11-D (Figure 7).
5. In District 15 salmon may be taken only in Sections 15-A and 15-C.
6. The troll fishing schedule in portions of State waters off Yakutat, beginning August 7, corresponds to weekly fishing periods in the set gillnet fisheries (Figure 8).

If a regionwide troll closure is implemented to conserve coho salmon during late July or early August, the likelihood of a closure during mid-August to meet the allocation criteria will be reduced. Any potential transfer of coho salmon harvest to inside fisheries resulting from an early closure, if implemented, will be reflected in inside fishery performance indicators used for comparison against the allocation criteria.

Tentative 2006 Summer Season Schedule

The following is a generalized timetable for summer salmon management. It is emphasized that some modifications to this schedule may be required.

DATES	EXPECTED REGULATORY ACTIONS
July 1	Open the 2006 general summer troll season for all species; the initial troll king salmon opening will close when 70% of the total summer harvest target has been harvested. The first king salmon retention period will be managed in season with no pre-determined length. The waters of frequent high king salmon abundance will close following the king salmon closure.
Mid through late July	Assess coho salmon run strength in Southern Southeast Alaska. Portions of Districts 101–104 may close if run strength indicates conservation concerns for coho salmon stocks near the U.S./Canada border.
Late July/early August	Seven-day, regionwide conservation closure if projected run size is less than 1.1 million wild coho salmon; the projected total season commercial harvest will be used as index of run size.
Mid to late August	<p>A regionwide closure of up to 10 days will be implemented if required for either coho salmon conservation or allocation based on assessment of stock and fishery performance data relative to BOF-established criteria. If a region wide conservation closure has occurred during late July, the likelihood of a closure being implemented for allocation at this time will be reduced.</p> <p>Following any closure of the troll fishery, the king salmon fishery will reopen to take all of the remaining treaty quota king salmon. A minimum closure of 2 days is required prior to the second king salmon opening to allow for a fair start (5 AAC 29.100(c)(1)(B)(ii)).</p> <p>During the closure period, a chum salmon fishery may occur in the Sitka Sound and Neets Bay areas (Figures 9 & 10).</p>
Late August to September 20	Coho salmon conservation measures implemented regionwide or by area, as required, to protect weak coho stocks.
Mid-September	An assessment of coho strength to determine if the troll season may remain open no longer than September 30.
September 20	<p>Established regulatory closing date of 2006 general summer troll season.</p> <p>All salmon must be offloaded prior to fishing in the Winter Troll Fishery beginning October 11.</p>

The widespread and complex nature of the troll fishery necessitates a closely coordinated management program. Inseason management is accomplished through a team consisting of the Southeast regional supervisor and management biologist, two troll fishery management biologists, and 12 area management biologists. ADF&G contact information is listed at the end of this plan.

OPEN AREAS DURING 2006 GENERAL SUMMER TROLL SEASON

Salmon trolling is permitted in all areas during the first king salmon retention period of the 2006 general summer season except for those waters described above (5 AAC 29.100) and the closed waters listed in 5 AAC 29.150. In addition, during subsequent king salmon retention periods, waters designated as frequent high king salmon abundance (5 AAC 29.025) will be closed as necessary. During the 2006 Board of Fisheries meeting in January, the northern boundary of the high king salmon abundance area along Yakobi Island was changed and moved south approximately 1/3 N. miles. The new northern boundary is now at 58°05.00' N. lat. (5 AAC 29.025(a)(3)).

REGULATIONS PERTAINING TO COMMERCIAL TROLL BYCATCH OF GROUND FISH AND HALIBUT

For a complete guide to the Southeast Alaska Groundfish regulations, refer to the 2003–2006 Groundfish Fishery Commercial Fishery Regulations books available at all Southeast ADF&G area offices.

- (1) Commercial halibut may be legally retained only by trollers holding individual fishing quota shares (IFQs) during the open season for halibut, March 5–November 15 (50 Code of Federal Regulations (CFR) 679.4 (d)) and 5 AAC 28.133 (c). Trollers holding unfilled IFQs are required to retain any halibut taken incidentally while trolling (50 CFR 679.7 (f)(11)). If trollers have no more than 500 pounds of halibut onboard and if landed concurrently with a legal landing of salmon, they can offload their catch without having to give a 3-hour notice to the National Marine Fisheries Service (50 CFR 679.5 (l)(1)(iv)). Trollers fishing for salmon in Sitka Sound may retain halibut bycatch if they hold IFQs (50 CFR 300.63). Halibut taken incidentally while trolling for salmon should be reported on the same troll ticket with the salmon harvest.
- (2) Lingcod greater than 27" (tip of snout to tip of tail) may be taken as bycatch in the commercial salmon troll fishery from **May 16 through November 30** (5 AAC 28.113 (c)) in areas in which the troll bycatch allowance has not been harvested. Troll bycatch limits have been established for the Northern Southeast Outside (NSEO), and the East Yakutat (EYKT) management areas. In the NSEO area, trollers may retain lingcod (round weight) up to 5% of the round weight of salmon onboard. In the EYKT area, trollers may retain lingcod (round weight) up to 10% of the round weight of salmon onboard. The Icy Bay Subdistrict is closed to all commercial lingcod retention on June 7 and will be closed for the remainder of the year. When the troll lingcod quota is reached for each management area, trollers will be required to release all lingcod back into the water. There are no troll bycatch limits in the other management areas, so trollers may retain unlimited amounts of lingcod over 27" in length until the troll allocation is reached in each area (5 AAC 28.133(a)). Inseason closures may occur on short notice and will be announced by news release, National Weather Service and Coast Guard broadcasts.
- (3) Trollers are requested to retain tagged **lingcod** of any size and to notify the nearest ADF&G office at the time of delivery so the fish may be sampled. Tagged lingcod may be retained at any time, however tags must remain attached to any tagged lingcod that are undersized or taken out of season or in a closed area. Fish may be landed dressed, with the head attached.

The date, exact location, and depth should be recorded. A reward will be given to those who turn in tagged lingcod with the necessary catch information. (In Sitka, contact Mike Vaughn, 304 Lake Street, Room 103; phone: 907-747-6688).

- (4) Trollers are reminded that the waters of Sitka Sound are closed permanently to the taking of lingcod and black rockfish (5 AAC 28.150 (a)). Trollers who have lingcod onboard may not fish in areas closed to lingcod retention.
- (5) Full retention of Demersal Shelf Rockfish (DSR) is required in all state and federal waters. All Commercial Fisheries Entry Commission (CFEC) permit holders must retain, weigh, and report all DSR taken. All DSR in excess of 10% round weight, of all target species on board the vessel must be weighed and reported as bycatch overage on an ADF&G fish ticket. All proceeds from the sale of excess DSR bycatch taken in state waters shall be surrendered to the state (5 AAC 28.171 (a)). DSR bycatch overage taken in federal waters may not be sold but must be reported on a fish ticket. The seven species of rockfish in the DSR assemblage are yelloweye, quillback, canary, rosethorn, copper, china, and tiger rockfish. Retention of other rockfish species is allowed but is not required.
- (6) Trollers are allowed to longline for groundfish and troll for salmon on the same trip as long as salmon are not onboard the vessel in an area closed to trolling and the fisher has both a commercial salmon permit and a commercial longline permit.

RULES PERTAINING TO SWITCHING BETWEEN COMMERCIAL TROLL GEAR AND MECHANICAL JIG/DINGLEBAR GEAR

Salmon must be offloaded prior to fishing with mechanical jig or dinglebar gear (5 AAC 28.133(b)). A vessel, fishing for groundfish with dinglebar gear must display the letter “D”. A vessel, fishing for groundfish with mechanical jig gear must display the letter “M” (5 AAC 28.135). A vessel, fishing for salmon cannot have the letter “M” or “D” displayed.

SPORT FISHING AND CHARTERING FROM A REGISTERED TROLL VESSEL

1. Sport fishing is allowed from a registered commercial salmon troll vessel (5 AAC 47.041 (a)).
2. If sport fishing in **waters closed** to commercial trolling, the dorsal fin must be removed immediately from any salmon brought onboard the vessel (5 AAC 47.041(c)). This regulation also applies when a person is sport fishing for a **species closed** to commercial trolling.
3. Sport fishing from a commercially licensed vessel, while commercially caught salmon are in possession, is illegal in waters closed to commercial salmon fishing (5 AAC 47.041(d)).
4. A vessel registered for commercial trolling may also be registered as a charter vessel, though a vessel may not be used for both activities on the same day (5 AAC 75.995 (8)). Sport-caught fish may not be sold.
5. A troll gurdy may NOT be used in conjunction with a fishing rod while fishing commercially but may be legally used as a downrigger to sport fish from a hand or power troll vessel (5 AAC 29.120 (e)).

These regulations can be found in the 2006 Sport Fishing regulation booklet.

REGIONAL AQUACULTURE TERMINAL HARVEST AREAS

Terminal harvest areas (THAs) are described in the Southeast Alaska and Yakutat Commercial Salmon and Miscellaneous Finfish Regulations book. Hidden Falls, Inner Silver Bay, Neets Bay, Anita Bay, Deep Inlet, and Nakat Inlet THAs will be open to the harvest of all salmon species as announced and will be closed by emergency order. Trollers are requested to consult the appropriate terminal harvest area News Releases or contact any ADF&G office for the exact harvest schedules for each THA.

SITKA SOUND CHUM SALMON PLANS FOR 2006

Sitka Sound

Northern Southeast Regional Aquaculture Association (NSRAA) has projected a return of approximately 1,822,000 chum salmon to the Deep Inlet THA and Medvejie Hatchery in 2006, with approximately 1,427,000 chum salmon available for common property fisheries. This projected return is smaller than the 2005 projection by 478,000 fish, though similar to the expected return in 2004. The Deep Inlet THA rotational schedule began on April 30 to allow net fisheries to intercept Medvejie hatchery Chinook. The THA is open to trolling one day per week (Wednesday or Thursday) between May 4 and June 29. An area has also been established in Sitka Sound where trollers may target chum salmon during the troll coho closure in August (5 AAC 29.112) (Figure 9).

ADF&G issued a news release on June 16 describing Deep Inlet openings to target chum salmon. Beginning July 3, trolling will be allowed in the THA each Monday, Tuesday, Friday, and Saturday through July 22 and August 7 through August 19, unless changed by a subsequent announcement. Trolling will also be allowed on July 27 and August 2. Trolling will be allowed during these scheduled times as long as it does not interfere with cost recovery fishing. Once cost recovery goals are met, the troll opening schedule will revert to one day per week, on alternating Wednesdays and Thursdays, until the end of the season. The NSRAA Board decided at their March meeting in Sitka that cost recovery fishing will begin around July 1.

NEETS BAY CHUM SALMON PLANS FOR 2006

Neets Bay

The Neets Bay Special Harvest Area (SHA) has been open to trollers since April 15 and will be open until further notice. SSRAA will allow trollers to harvest summer chum in the SHA, with the target goal of 200,000 fish. SSRAA anticipates allowing troller access in the SHA throughout the summer chum return that peaks July 25 through approximately August 10. SSRAA will consider closing the SHA in inner Neets Bay under the following circumstances:

- On July 20, the return appears to be 15% less than forecast;
- Difficulty in capturing the required broodstock for the hatchery; and
- A harvest rate that suggests troller harvest would exceed 200,000 fish.

In addition, an area has been established in Neets Bay where trollers may target chum salmon during the troll coho closure in August (5 AAC 29.112). ADF&G may open, by emergency order, the waters of Neets Bay from the longitude of Chin Point to the longitude of the easternmost tip of Bug Island (Figure 10). SSRAA is expecting a summer chum salmon return to the Neets Bay terminal area of approximately 1,010,000 fish.

FIGURES

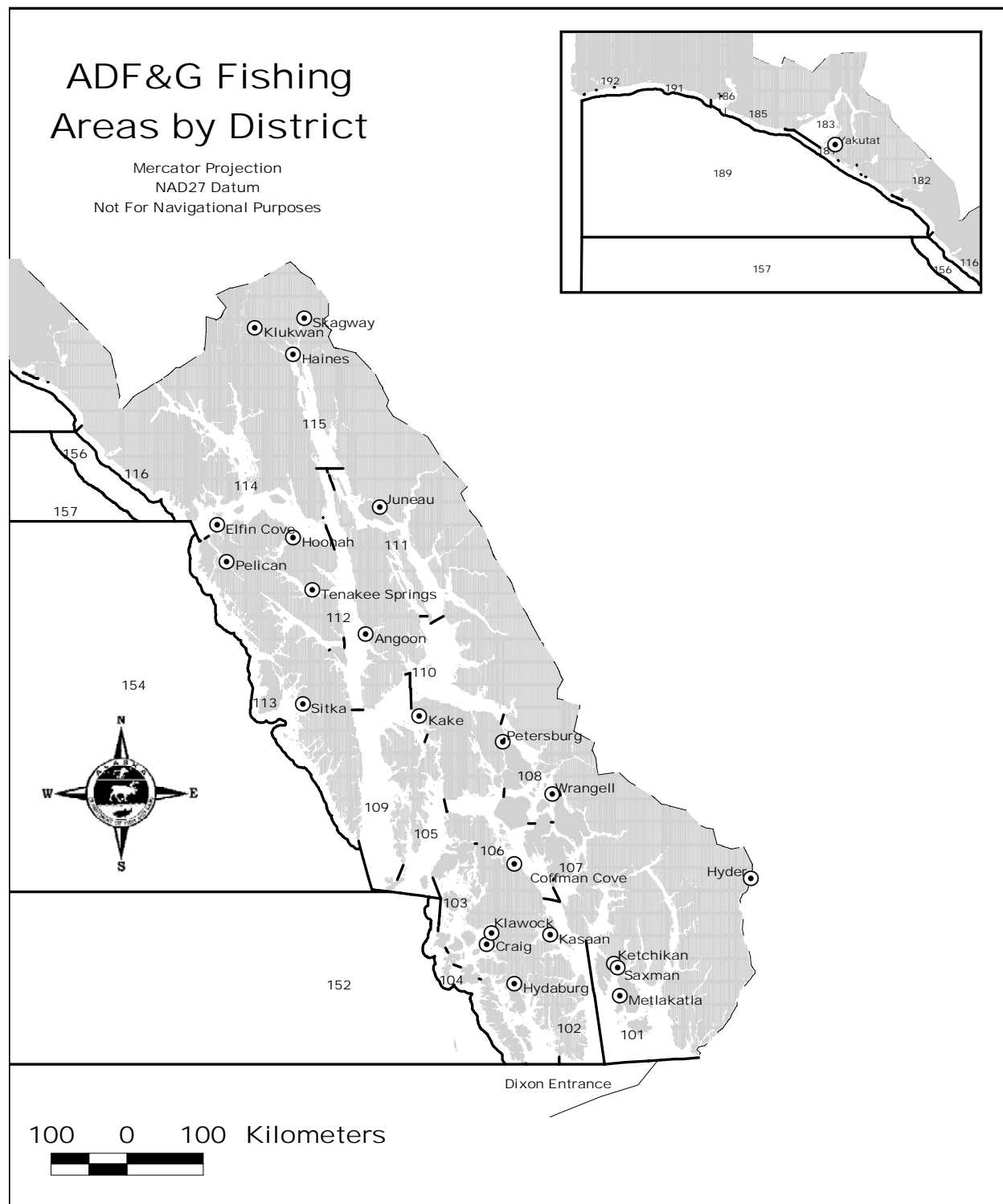


Figure 1.—General summer catch reporting districts.

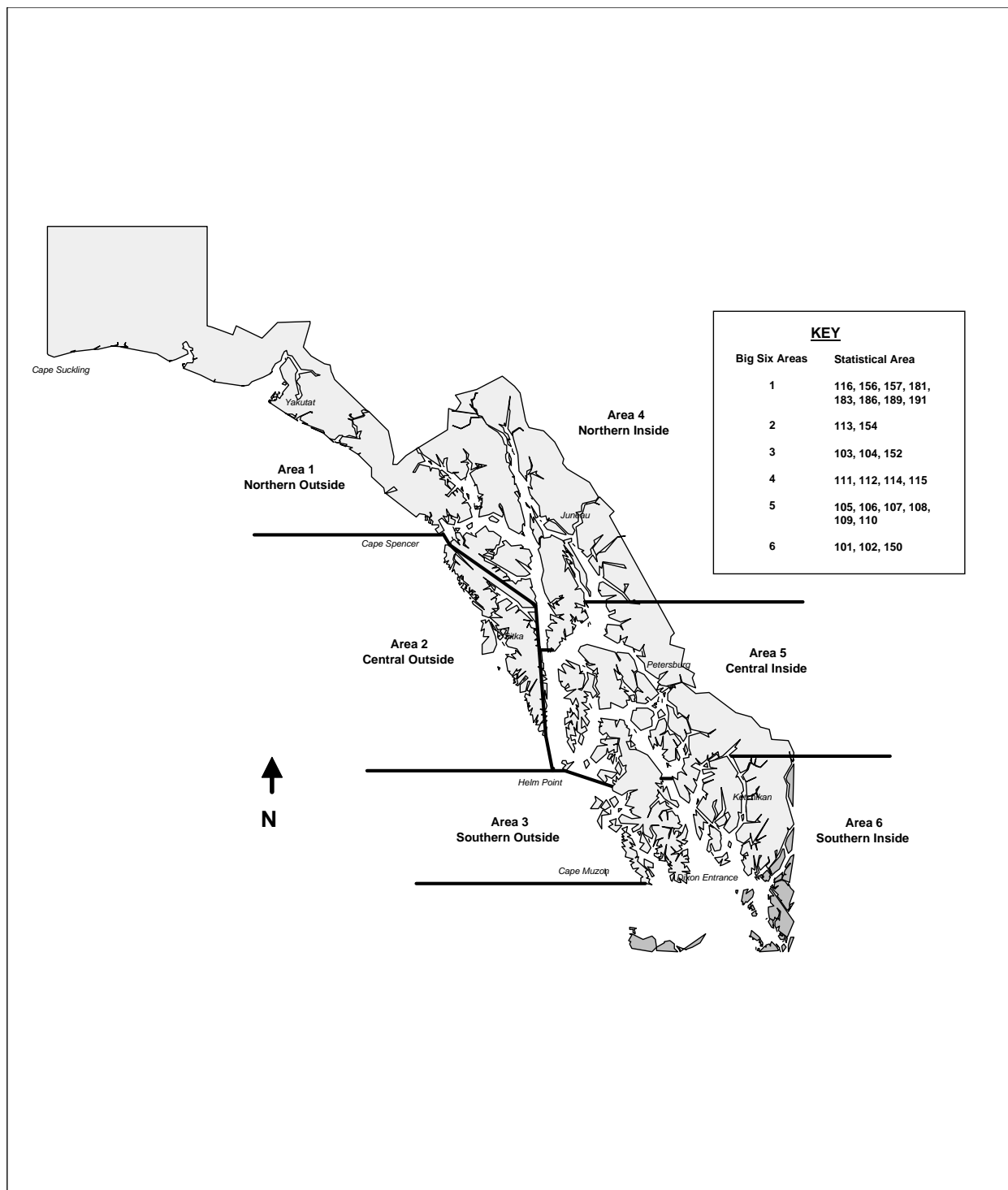


Figure 2.—Fisheries Performance Data program reporting areas in Southeast Alaska.

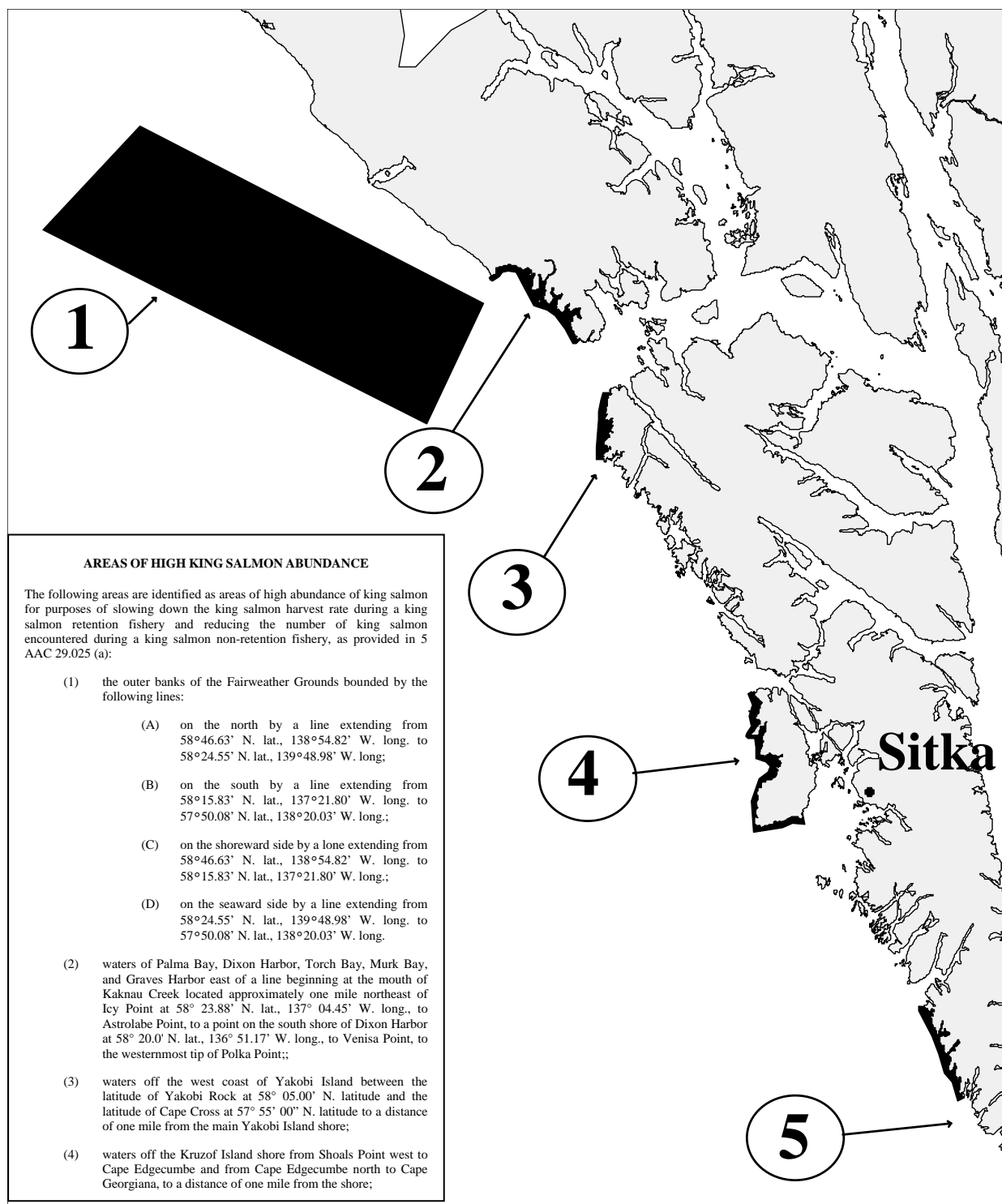
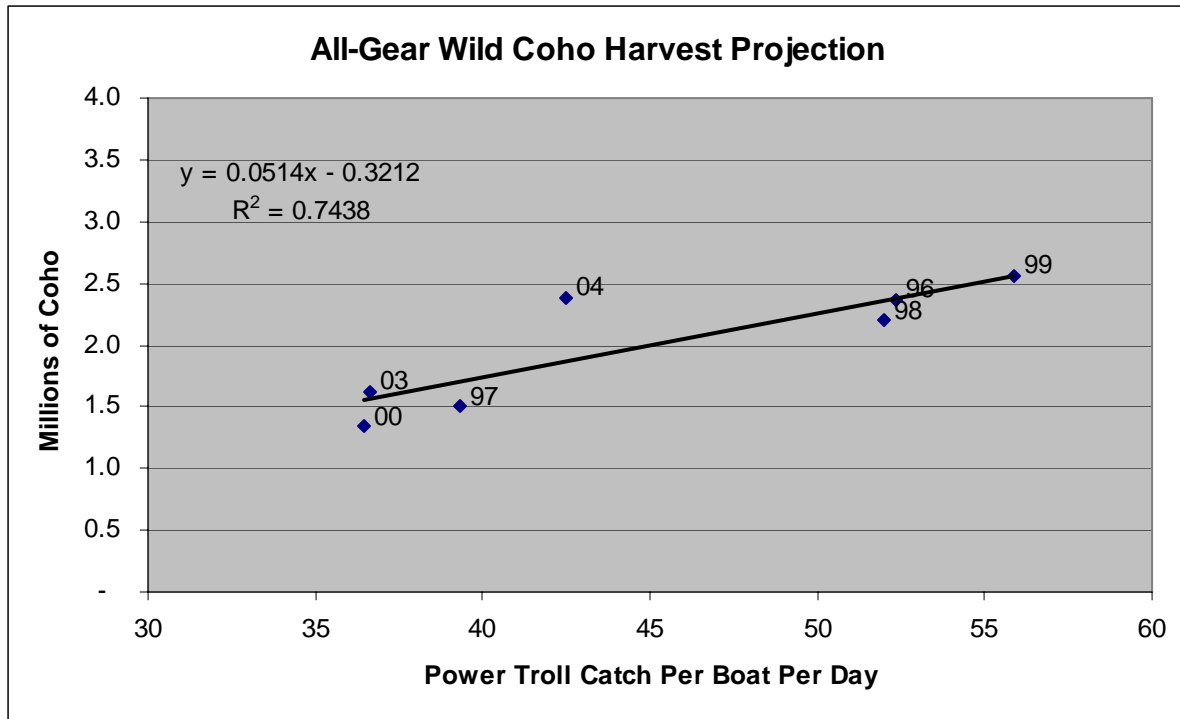
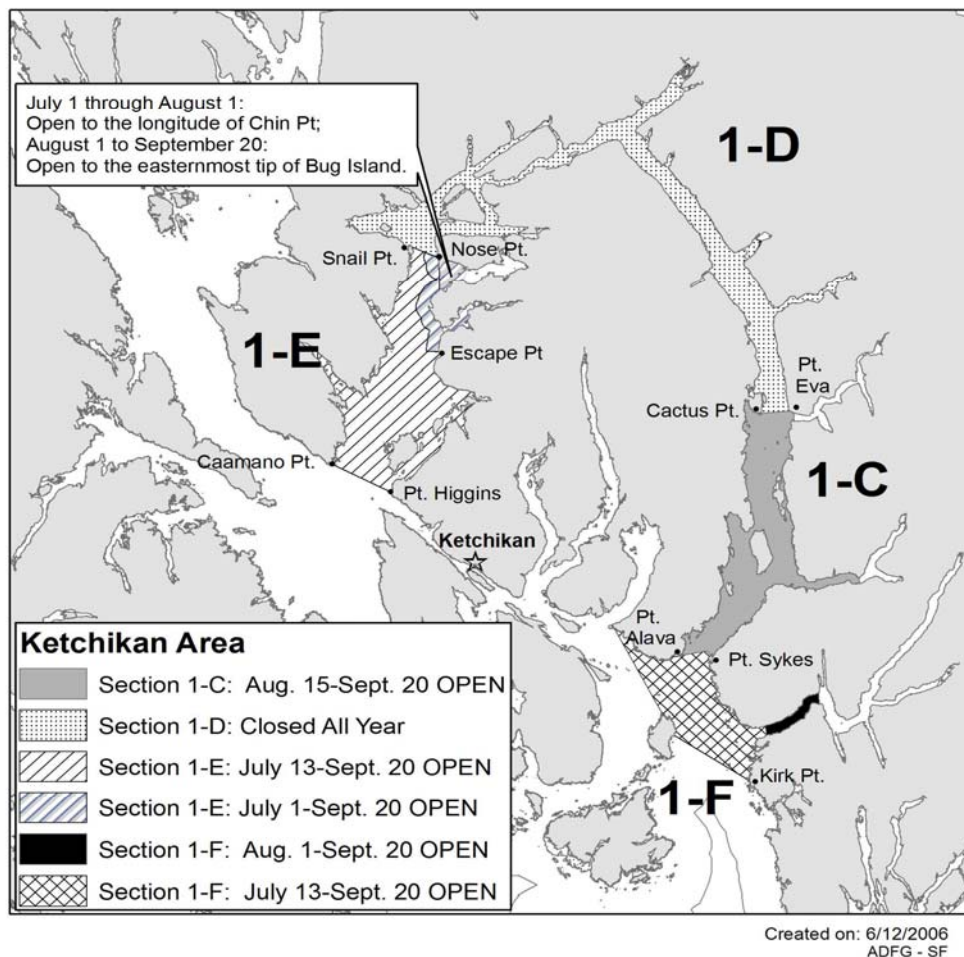


Figure 3.–Southeast Alaska areas closed to trolling for all species following the initial king salmon opening in the Southeast Alaska summer troll season.



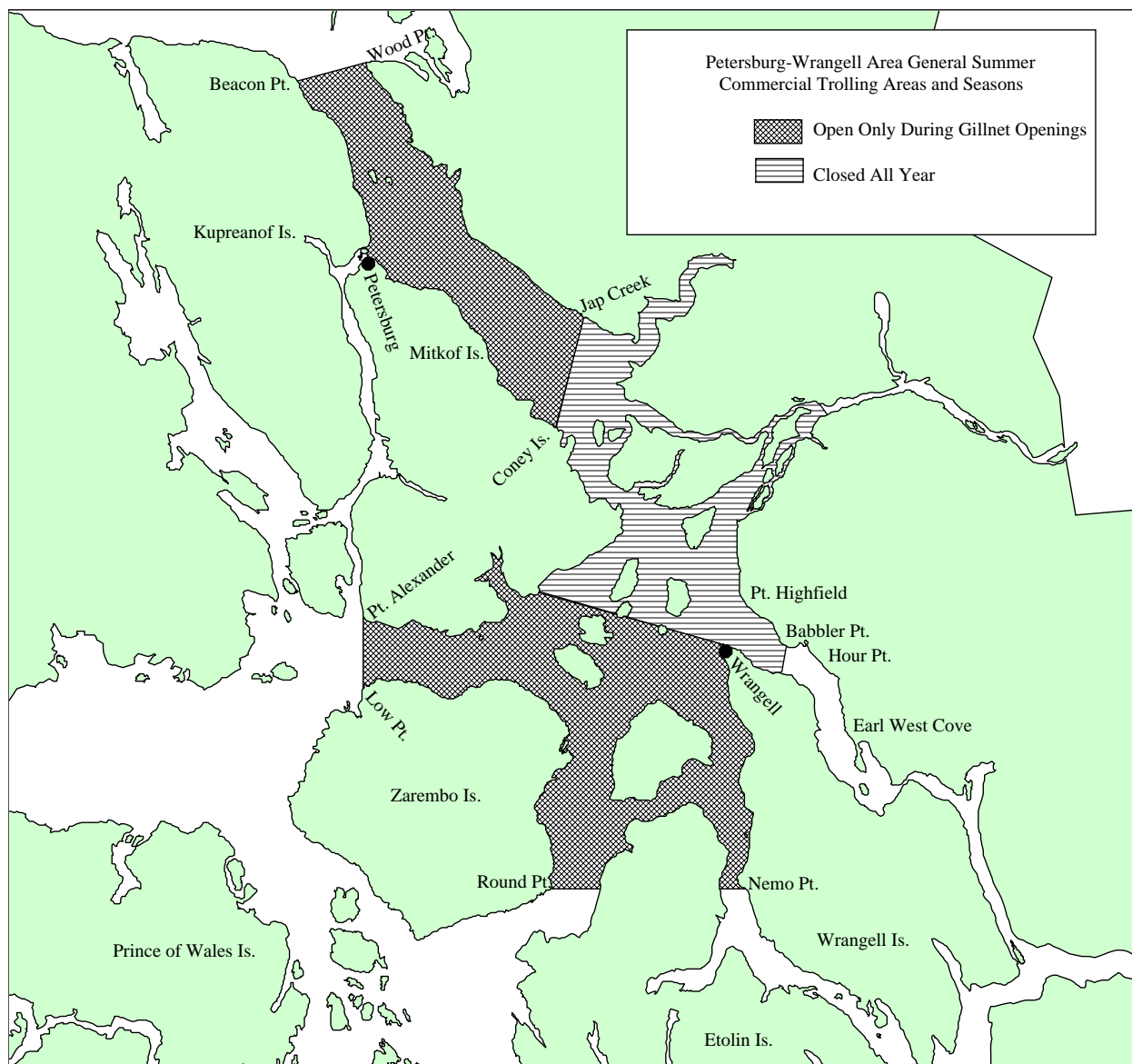
Note: Y axis = Region total commercial wild coho salmon catch prediction (excluding hatchery cost recovery). X axis = Troll fishery average power troll wild coho catch per boat day for Statistical Weeks 28-29 (July 7–20), which is calculated by adding the average daily catch rate for boats that make a landing in week 28 (July 7–13) and the average daily catch rate for boats that make a landing in week 29 (July 14–20).

Figure 4.—The linear regression model that is used inseason to predict the wild Southeast Alaska commercial coho salmon catch.



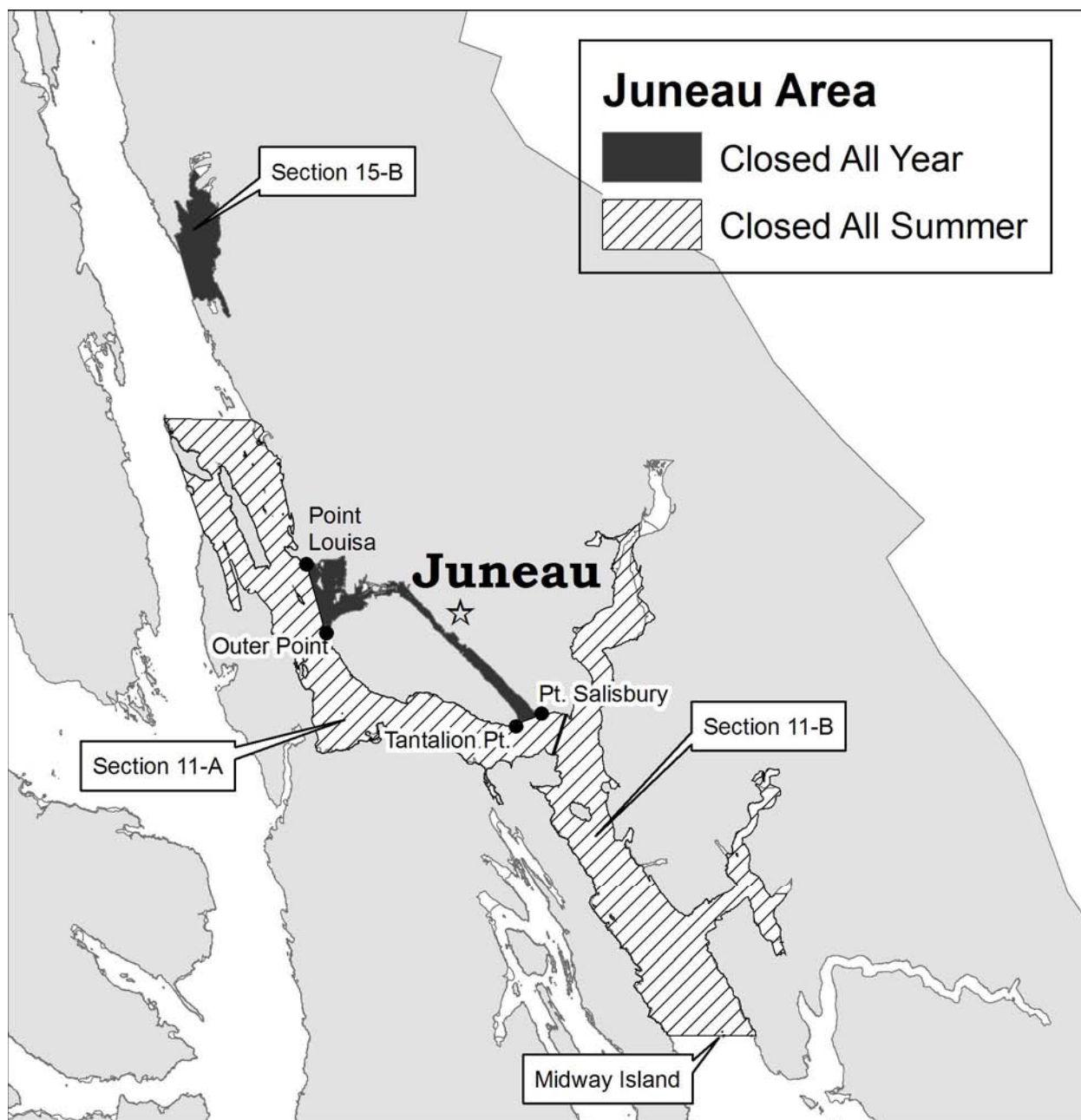
Note: This map is for general information only and does not exempt trollers from provisions in 5 AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by ADF&G. The general summer troll fishing season applies to those areas not specified in the key or in 5 AAC 29.150.

Figure 5.—Ketchikan area general summer trolling areas and seasons.



Note: This map is for general information only and does not exempt trollers from provisions in 5 AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by ADF&G. The general summer troll fishing season applies to those areas not specified in the key or in 5 AAC 29.150.

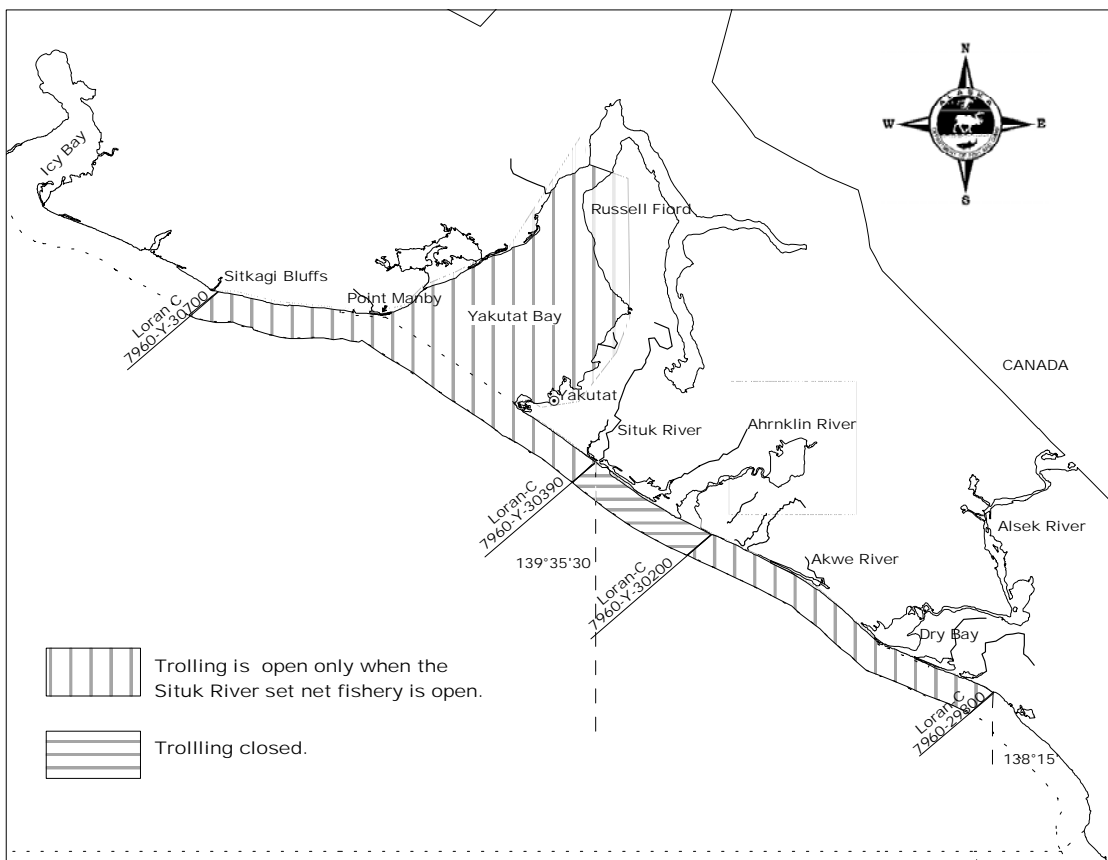
Figure 6.—Petersburg/Wrangell area general summer trolling areas and seasons.



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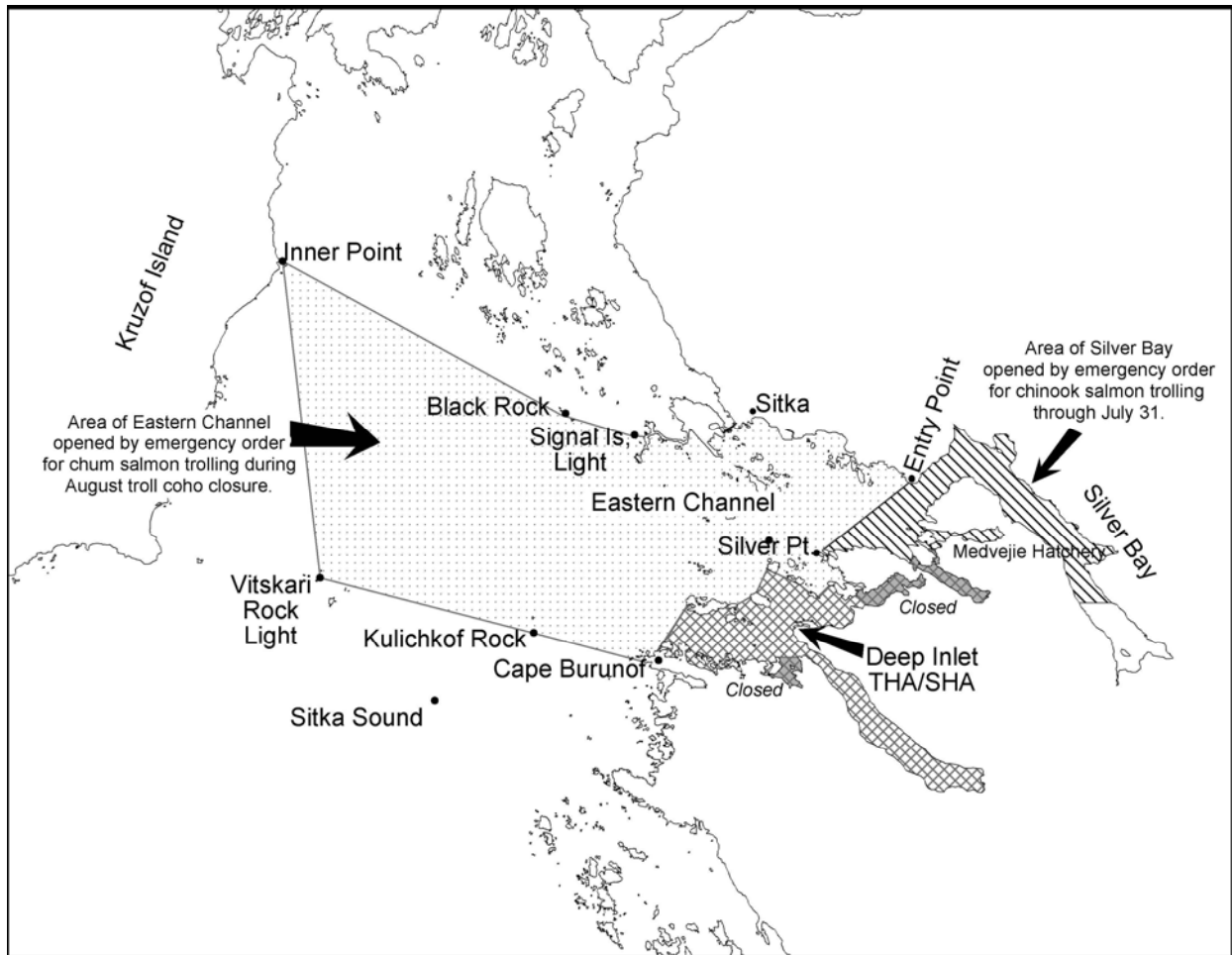
Note: This map is for general information only and does not exempt trollers from provisions in (5 AAC 29.150 (CLOSED WATERS)) or Emergency Orders issued by ADF&G. The general summer troll fishing season applies to those areas not specified in the key or in 5 AAC 29.150.

Figure 7.—Juneau area general summer trolling areas and seasons.



Note: This map is for general information only and does not exempt trollers from provisions in 5 AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by ADF&G. The general summer troll fishing season applies to those areas not specified in the key or in 5 AAC 29.150.

Figure 8.—Trolling times and areas for the Yakutat area, beginning August 7.

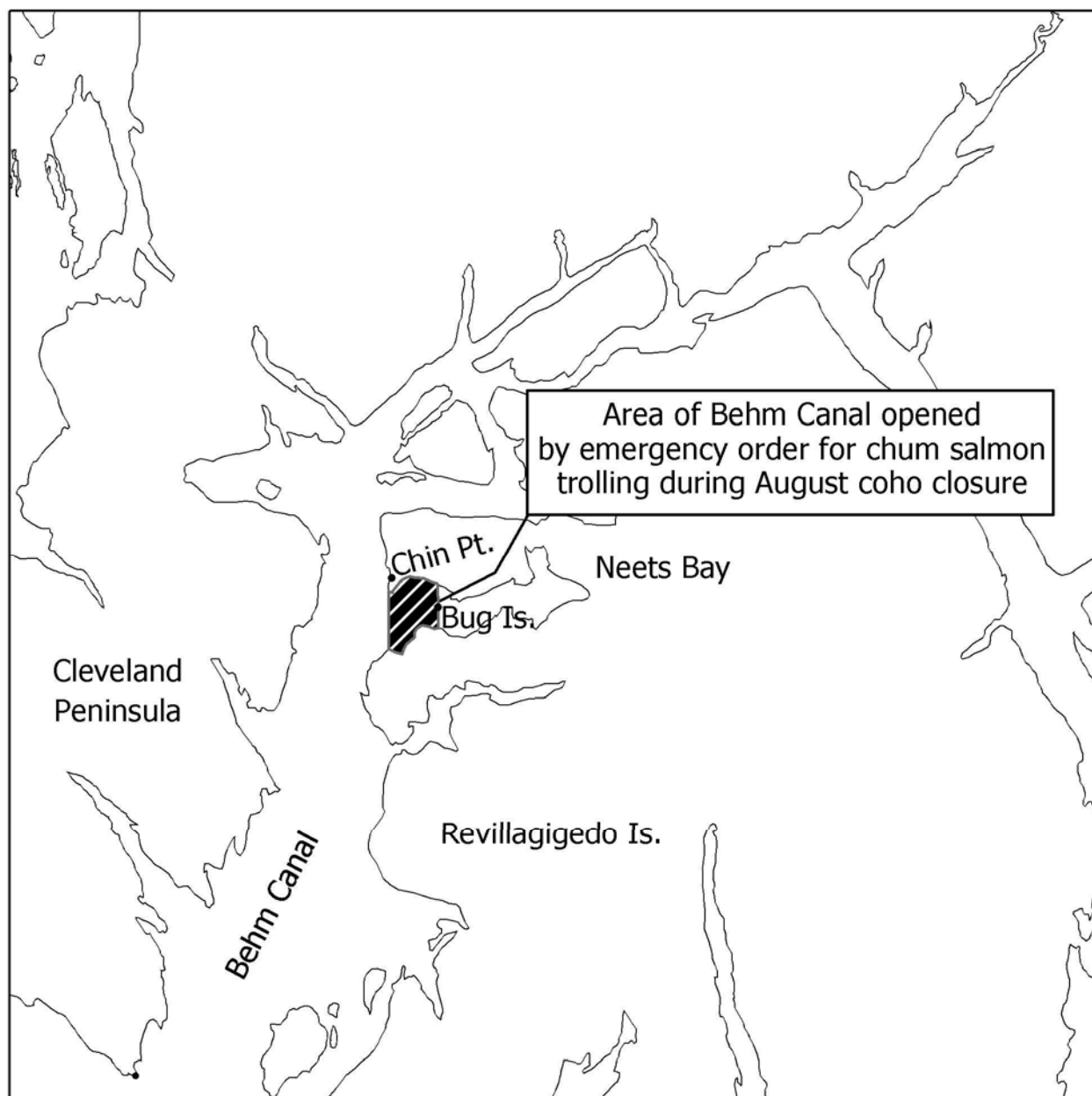


Note: The area shown is the area described in 5 AAC 29.112(b). The actual area that will be open by Emergency Order may be different. The eastern portion of Eastern Channel has normally been closed during the chum fishery in past years.

This map is for general information only and does not exempt trollers from provisions in 5 AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by ADF&G.

A description of the Deep Inlet THA and schedule of troll openings can be found in the Deep Inlet THA news release issued on June 16, 2006.

Figure 9.—Silver Bay and Eastern Channel Special Harvest Areas and terminal troll areas for chum salmon in Sitka Sound (113-35).



Note: This map is for general information only and does not exempt trollers from provisions in 5 AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by ADF&G. The general summer troll fishing season applies to those areas not specified in the key or in 5 AAC 29.150.

Figure 10.—Neets Bay Terminal Harvest Area for chum salmon fisheries.

FISHERY CONTACTS

The following are ADF&G Division of Commercial Fisheries contacts regarding this management plan:

Brian Lynch Troll Management Biologist P. O. Box 667 Petersburg, Alaska 99833 (907) 772-3801	Pattie Skannes Assistant Troll Management Biologist 304 Lake Street, #103 Sitka, Alaska 99835 (907) 747-6688
William Bergmann and Troy Thynes Management Biologists P. O. Box 667 Petersburg, Alaska 99833 (907) 772-3801	Scott Kelley Regional Supervisor P. O. Box 110024 Douglas, Alaska 99811-0020 (907) 465-4250
Bill Davidson Regional Management Biologist 304 Lake Street, # 103 Sitka, Alaska 99835-7653 (907) 747-6688	Dave Gordon and Eric Coonradt Management Biologist 304 Lake Street, # 103 Sitka, Alaska 99835-7653 (907) 747-6688
Scott Forbes Management Biologist P.O. Box 200 Wrangell, Alaska 99829 (907) 874-3822	Kevin Monagle and Dave Harris Management Biologists P. O. Box 110024 Douglas, Alaska 99811-0020 (907) 465-4250
Phil Doherty, Justin Breese and Bo Meredith Management Biologists 2030 Sea Level Drive, Suite, 205 Ketchikan, Alaska 99901 (907) 225-5195	Randy Bachman Management Biologist P.O. Box 330 Haines, Alaska 99827-0330 (907) 766-2830 or 3124
Gordon Woods Management Technician P. O. Box 49 Yakutat, Alaska 99689-0049 (907) 784-3255	

For up-to-date troll information, call the 24-hour information line in the Douglas Office at 465-TROL (8765). In addition, the following telephone numbers may be called during the troll fishing season to obtain recorded announcements concerning areas open to trolling.

Ketchikan-(907) 225-6870	Sitka-(907) 747-8765	Petersburg-(907) 772-3700
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SOUTHEAST ALASKA TROLL WEBSITE

www.cf.adfg.state.ak.us/region1/finfish/salmon/troll/trolinfo.php